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HEARINGS

Before The

SUBCOMMITTEE ON AIR AND WATER POLLUTION

COMMITTEE ON PUBLIC WORKS

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United States Senate

Subcommittee on Air and Water  
Pollution of the Committee on  
Public Works

Washington, D. C.

The Subcommittee met at 2:00 p.m., pursuant to recess, in the Public Hearing Room of the Atomic Energy Commission, The Capitol, Senator Jennings Randolph (Chairman of the full Committee) presiding.

Present: Senators Randolph, Muskie, Jordan, Tunney, Bentsen, Cooper, Boggs, Baker and Buckley.

Also present: M. Barry Meyer, Chief Clerk, Thomas C. Jorling, Minority Counsel, J. B. Huyett, Staff Director and Leon G. Billings, Professional Staff.

Senator Randolph. Gentlemen of the Committee, the hearing shall be in order.

Senator Eagleton. Mr. Chairman, before we move into the next area of consideration, I was wondering if I could just lay down an amendment before the Committee, which the staff will have an opportunity to look at before our next meeting.

We will have copies made for each member of the Subcommittee so that when we have our next meeting, the thing

1 will be familiar to everybody, and so that everybody will  
2 have an understanding of what it is all about.

3 Senator Randolph. I think this will be helpful.

4 I have discussed with the staff and others your  
5 proposal.

6 I think there is perhaps some areas in which there  
7 may be some type of agreement.

8 There is some problem as it now stands, and I  
9 indicated that yesterday in slight degree, but certainly  
10 it is a proposal that, one that must be given attention, and  
11 we will certainly do that, and I suggest that you do that,  
12 and if there is no objection, let us just look into this  
13 the way you have indicated.

14 Senator Eagleton. Fine. Thank you, Mr. Chairman.

15 I will lay it before the Committee.

16 Mr. Billings. Mr. Chairman, the staff is sort of at  
17 a loss.

18 Has anything happened to ocean dumping and the  
19 reimbursement questions?

20 Senator Randolph. No, there is nothing.

21 Mr. Billings. Then it is still under consideration.

22 Then I guess that means biting the bullet on the  
23 question that the members had discussed at a previous  
24 session, providing direction to the staff on the direction  
25 to proceed as to the kind of standard that the bill sets



3           1       forth in terms of the enforcement of the regulatory procedure,  
2           2       as to whether to follow the national water quality standards  
3           3       approach, as the Committee print, or the no-discharge approach,  
4           4       as has been posed by Senator Muskie.

5           5       The staff has attempted to draft some language, which  
6           6       represents a method of approach on no-discharge standards.

7           7       Has that been distributed?

8           8       The Secretary. No.

9           9       Mr. Billings. Could we have it distributed, please.

10          10       Section 301.

11          11       Mr. Billings. Mr. Chairman, the language that was  
12          12       just distributed, section 301, in order to be clear, it  
13          13       is "Standards and Enforcement" policy.

14          14       The change merely picks up the objectives printed in  
15          15       Title 1, 101, page 2 of the print, and cross-references  
16          16       appear to Section 301(a), and I will read this language  
17          17       to the Committee members.

18          18       SEC. 301(a) The purpose of this Title is to achieve  
19          19       the water quality objectives of this Act through elimination  
20          20       of the discharge of pollutants into the navigable waters  
21          21       of the United States by 1985.

22          22       "(b) Except as provided pursuant to this section and  
23          23       section 306, section 307 and section 40\_, the discharge of any  
24          24       pollutants into the navigable waters of the United States by  
25          25       any person shall be unlawful.

4 1 "(c) In order to carry out the purposes of this Act  
2 there shall be achieved --

3 "(1) (A) not later than January 1, 1976 effluent limita-  
4 tions for point sources other than publicly owned treatment  
5 works which at a minimum require:

6 "(i) the application of the equivalent of secondary  
7 treatment as identified by the Administrator pursuant to  
8 Section 304(b); or

9 "(ii) in the case of a discharge into a publicly owned  
10 treatment works compliance with any applicable, local, State  
11 or Federal pretreatment requirements and any Federal require-  
12 ments under section 307 of this Act;

13 "B) not later than January 1, 1977 for publicly owned  
14 treatment works secondary treatment as identified by the  
15 Administrator pursuant to section 304( ); or,

16 (C) in any case any more stringent effluent limitation,  
17 treatment standards or schedule of compliance required under  
18 any other State or Federal law, or required by any provision  
19 of the Federal Water Pollution Control Act prior to the date  
20 of enactment of this Act.

21 "(2) (A) Not later than January 1, 1981, effluent  
22 limitations for point sources other than publicly owned  
23 treatment works which require --

24 "(i) compliance with subsection (a) of section 301  
25 unless the owner or operator of any such source demonstrates  
that the greatest degree of effluent control through the

5           1       application of best available technology will not provide for  
2           2       such compliance, in which event there shall be applied an  
3           3       effluent limitation no less stringent than any standard of  
4           4       performance for such category or class of such source esta-  
5           5       blished under section 306; Provided that, if no standard  
6           6       of performance is applicable there shall be applied an  
7           7       effluent limitation which establishes the greatest degree  
8           8       effluent control achievable through the application of best  
9           9       available technology as identified by the Administrator  
10          10       pursuant to section 304(b); or --

11       (ii) in the case of a discharge into a publicly owned treat-  
12       ment works compliance with any applicable local, State or  
13       Federal pretreatment requirement and any Federal require-  
14       ment under Section 307 of this Act; and

15               "(B) not later than January 1, 1981, for publicly  
16       owned treatment works compliance with the requirements  
17       established under Section 201(d).

18               "(d) Any effluent limitations required by this  
19       section shall be reviewed at least every five years and  
20       revised as necessary to achieve compliance with subsection  
21       (b) of this section.

22               "(e) Effluent limitations established pursuant to  
23       this section shall be applied to all sources of discharge  
24       by permit pursuant to section\_\_ of this Act.

6 1 "(f) Each State shall after notice and public hearings  
2 adopt and submit to the Administrator prior to January 1,  
3 1977 --

4 "(1) a list including each point source in such  
5 State which is not expected to be in compliance with sub-  
6 section (b) of this section on or before January 1, 1981,  
7 which such list shall include --

8 "(A) a justification for such failure to comply,

9 "(B) a proposed effluent limitation based on the  
10 best available control technology, and

11 "(C) an estimate of the date of compliance with  
12 subsection (b) of section 301 which shall not  
13 be later than January 1, 1985;

14 "(2) an estimate of the economic and social (A) costs  
15 to achieve compliance with subsection (a) of section 302 in  
16 such State; and

17 "(B) benefits achieved by such compliance."

18 Senator Randolph. I ask this question more for clari-  
19 fication. Perhaps it will make it clearer to others.

20 Leon, on page one, in Subsection (b), "not later than  
21 January 1, 1977," that language, then I try to relate it over  
22 to page 2(b), not later than January 1981, and so on.

23 Timewise, is there any problem there?

24 Can you explain that?

25 Mr. Billings. The dates do not track as they should.



7      1            Theoretically there is a five-year rationing effect,  
2            the date on paragraph (b), page two, should be January 1, 1982.

3            I think, Mr. Chairman, the other aspect of that is  
4            that the concern that has been expressed by the Adminis-  
5            tration is the construction industry could not gear up and  
6            invest \$12 billion as this legislation would authorize by  
7            1974.

8            There is some disagreement on that point.

9            Senator Randolph. What is Section 201(d)?

10          Mr. Jorling. That is the statement of policy.

11          Mr. Billings. Do you have a copy of that, the language  
12          of that?

13          Mr. Billings. It is in the print.

14          (Whereupon, the language was read from the print.)

15          Senator Randolph. Barry, do you have any comment  
16          on that?

17          Mr. Meyer. Going back to the question raised, with  
18          respect to the dates, and the date of 1975, beginning with  
19          fiscal 1975, you have got to go to something other than  
20          secondary treatment, which you may or may not, but should  
21          not the first subsection (b) (1) (C) (1b), be keyed more  
22          to not later than, or for projects approved by July 1,  
23          1974, that this would be the standard, and the rest of it  
24          is for projection after that date, they have got to go to the  
25          other standard, or else you will have projects which are

1 required under one section of the Act to be one kind of thing,  
2 under this section, may be interpreted to do something else,  
3 so really, I think your approval mechanism thing should be  
4 worked in, and to set your dates better.

5 Mr. Billings. The presumption of the dates are that  
6 the Administration figure is that it will require \$12.6 billion  
7 to achieve secondary treatment for the Nation's sewered  
8 population, and something better than secondary treatment,  
9 and those funds are to be committed by the end of fiscal  
10 1974.

11 I do not know if that alters what you said.

12 In other words, this bill will have been committed  
13 to complete that secondary treatment objective, and some-  
14 thing more in such instances, by the end of 1974.

15 The theory of this bill is that those projects will  
16 be on the line in 1977.

17 Mr. Meyer. You asked me the question before, that  
18 may or may not be true, depending on the degree of difficulty  
19 of a particular project.

20 It is conceivable that something obligated during  
21 fiscal year 1974 will not come in line until after January,  
22 1977, because you cannot physically get it in the place.

23 Mr. Jorling. The Administrator estimated the time to  
24 have it in line, in the last of these fiscal years, would be  
25 1980, that is when the last project, that would be the

1 reasonable time at which those projects would be on the  
2 line.

3 Senator Boggs. And there are reasons for that, if  
4 I am correct, that the construction industry would not  
5 gear up to it faster.

6 Mr. Jorling. It is a part of the construction  
7 industry to respond, and also a reflection of those  
8 facilities being constructed in big cities, which are two  
9 or three-hundred million dollar projects, the length of  
10 time to get those constructed, from the time of initiation  
11 of construction, along the line, there is a longer period.

12 Mr. Meyer. Would it be better to key C(1)(B) to the  
13 date of obligation of those funds, rather than a date whereby  
14 which they may or may not be completed?

15 Mr. Billings. Unfortunately, the program to date has  
16 several hundred million dollars that are out, obligated,  
17 some which has been obligated as far back as the early  
18 '60's.

19 It has never been put into concrete.

20 Obligation may be the key to commencement of  
21 construction.

22 Senator Boggs. What would be holding those obligations  
23 up?

24 Mr. Billings. In many instances the states assigned  
25 priorities to communities that did not want to proceed, and

1 and the agency obligated the funds, and they have never  
2 gone back to free them.

3 They are beginning to go back and free those funds  
4 now.

5 Senator Randolph. These would not be monies at all  
6 in any nature impounded, would they?

7 Mr. Billings. No.

8 Senator Randolph. Do you have any feeling about  
9 this discussion?

10 Senator Muskie. I think the structure of the  
11 language reflects suggestions I made to the staff.

12 Maybe I can just touch upon the elements of this  
13 concept, so that you can see it, as I myself see it in  
14 this form.

15 First of all, I thought we needed, as clear and  
16 definite a commitment, a statement of what our ultimate  
17 object is as possible, to everyone concerned, the public,  
18 the municipalities, the states and industry.

19 I want them to understand what it is that we are  
20 striving for.

21 This is stated in two ways in this amendment.

22 First, in Section 301(a), it states in terms of  
23 water quality, that is the chemical, physical and biological  
24 integrity of the Nation's waters, and Subparagraph (b), in  
25 terms of the control mechanism that we intend to use, and



1 there it is stated that what we are aiming for is a no-  
2 discharge standard.

3 In these two paragraphs, you have both the water  
4 quality and the effluent discharge standard that we are  
5 shooting for.

6 Secondly, as far as these, to make that statement of  
7 policy credible, it indicates as firmly as we could, at  
8 least the outside timetable for achievement, so that all  
9 concerned would have some idea of the magnitude of the  
10 effort we were calling for, and that is why you have a  
11 deadline of 1985 indicated in Subparagraph A, and then,  
12 thirdly, in order to make those two statements a policy, and  
13 that deadline credible, it seems to me important to set in  
14 motion a procedure that would set definite interim goals,  
15 that would take us on the road to that, and this is the  
16 purpose of Subparagraph (c), which sets forth the  
17 deadline of January 1, 1976, and January 1, 1977, to achieve  
18 secondary treatment level, that in effect can be the  
19 culmination of the present program, and January 1981, setting  
20 the date for achievement of best available technology stand-  
21 ards, and then finally, the last date, roughly five years  
22 later, when we would achieve the objectives of the first  
23 two paragraphs.

24 Now, is that a fair summary of the structure of this  
25 amendment, and each of those points, there is a chance to

12 1 make what we come to call the midcourse correction, to zero  
2 in more precisely upon our targets, in light of the new  
3 information, and developments.

4 Senator Bentsen. Do we have a completed amendment  
5 here?

6 Senator Muskie. Section 301, Standards and  
7 Enforcement.

8 Senator Bentsen. The one I am trying to track you  
9 on, it does not comply with what you are saying.

10 Senator Jordan. I need one too.

11 Mr. Billings. The one change I read from the  
12 beginning, Senator Bentsen, the purpose of this Act is  
13 to restate the objective, instead of saying achieve water  
14 quality objective, we actually state the purpose of this  
15 Act is to restore and maintain the natural chemical, the  
16 integrity of the waters.

17 Senator Muskie. May I say finally, I have not had  
18 a chance to study the actual language. I do not know if  
19 from the drafting standpoint, it is as tight as it ought  
20 to be, but that is the concept behind it.

21 Senator Boggs. Mr. Chairman, my own thought for  
22 discussion purposes at this time, I think this approach  
23 is commendable, and I understand it, but, I think, however,  
24 I have maybe a slight reservation about it.

25 I think it is a minor reservation. I do not know

1 whether we want to, whether it is proper or best, to declare  
2 a no-discharge policy, and then set up and permit industry  
3 and municipalities to have permits for further discharges,  
4 from time to time, which would almost include anybody who  
5 came in and asked for a permit for further discharges, up  
6 to these years, even though we are leading toward a no-discharge  
7 policy in 1985.

8 I guess the best way to describe it, I do not know  
9 whether we are putting the cart before the horse or not.

10 Maybe it would be better to have the purpose of the  
11 Act entitled 101, declaration of policy, to achieve waters  
12 allowing balanced population if fish and so forth, and  
13 swimming by restoration of the waters natural chemical and  
14 biological integrity, with a declaration to achieve this  
15 water quality, that it is the purpose of this Act to eliminate  
16 all pollution discharge.

17 That would be the purpose, and then set up the  
18 plan, during the various phase periods of best practical  
19 technology, move along this way, and then we come to our  
20 inventory, and our needs, and our ability to put the best  
21 practical technology to the problem, and then we come to the  
22 midpoint, so to speak, and we take another assessment to see  
23 where we actually are, and what further we have to do, and  
24 to reach the no-discharge policy.

25 In other words, we are working towards the no-discharge

14 1 policy, and we admit that that is what we want, rather than  
2 set up a no-discharge policy, and then have all of the  
3 permits to discharge, in the briefest way.

4 I think what I am trying to say is very similar to  
5 the staff approach here, very similar indeed, and we are  
6 both headed in the same direction.

7 It is just that simple approach of trying to get the  
8 best technology as we go along to get to it, rather than say  
9 we will have a no-discharge policy, and issue the permits  
10 for whatever discussion it may be worth, Mr. Chairman.

11 Senator Muskie. Just one observation to that.

12 A continuing problem has been that of conforming this  
13 legislation to the Refuse Act permit program, and I think  
14 that is what the staff had in mind, in the use of this  
15 language.

16 Mr. Billings. That is correct, Mr. Chairman.

17 The Refuse Act sets forth the discharges of refuse,  
18 and then sets forth the alternative of granting a permit,  
19 allows the Secretary of the Army to grant a permit for  
20 discharge, so the procedure here by establishing a similar  
21 kind of prohibition, and exception procedure, will then, at  
22 least the staff hopes, will then make it possible to marry  
23 within the water quality act, the permit program, and the  
24 pollution control program, so that you can eliminate the  
25 terrible confusion that presently exists.



1 Senator Boggs. I understand that thoroughly, and  
2 that makes sense; however, the permit system could be geared  
3 to the best practical technology approach too.

4 Mr. Billings. Under the Staff's concept, the condition  
5 set forth in Subsection (C) would become the basis for the  
6 permit.

7 These would be the limitations that result in transcend-  
8 ing this policy into specifics, would be the specifics  
9 attached to the permit.

10 Senator Boggs. I understand.

11 Now, in the approach I was outlining here briefly,  
12 and I have more details about it, but this is similar to the  
13 one I think we used in the air bill, requiring the amendment  
14 in three years of national air quality standards, with the  
15 attainment of a national air quality goal at some future  
16 date, it is somewhat the same approach, with the exception  
17 that in the air bill, we had an emission control related to  
18 the ambient air quality, whereas with this, you establish  
19 effluent limitation, and then you measure your results, and  
20 you establish your limitations, and measure the results,  
21 rather than anticipate a relationship.

22 Senator Muskie. Do we have any Administration reaction  
23 to this?

24 Mr. Billings. We had a meeting with the Administration  
25 this morning.

1 Senator Randolph. I would ask you this, or as I know,  
2 we are all interested in enforcement, naturally, we must  
3 be.

4 I wonder whether you are not maybe making it easier  
5 for lesser enforcement than really what we want, in the way that  
6 it might be broken apart.

7 Senator Boggs. It would not be my intention to  
8 lessen enforcement in any way, and I would not want to do  
9 that, because I think the enforcement is a very important  
10 part of this program, fair and equal enforcement across the  
11 Country.

12 I was trying to simply say that, the thought is in  
13 my mind, is this psychologically the right thing to do to  
14 declare a no-discharge policy, and then issue permits for  
15 the next fifteen years for people to discharge.

16 Would it not be better to say we are shooting for  
17 eventually a no-pollutant policy, and in the meantime we are  
18 going to use the best practical technology approach to it over  
19 a period of time.

20 Mr. Billings. I think, Senator Boggs, that is  
21 essentially what this proposal does, except it uses the  
22 ability of the United States Government to regulate, or  
23 prohibit discharges as the enforcement mechanism.

24 The steps that are going to be taken in achieving the  
25 no-discharge are the best practical technology, but the means

17 1 to cause discharges to, that is, to permit discharges, is  
2 through a permit program, but without a permit, they do not  
3 have a right to discharge.

4 You have granted them a temporary use of the  
5 waters with a permit.

6 Senator Boggs. I agree, it is almost words that make  
7 the difference, but, for example, the approach is so similar,  
8 that I think in actual fact and development, the only  
9 difference would be found in Section 301(A), 301(b), I  
10 mean.

11 I am not making a big point of it. I just want to  
12 focus this up for Committee consideration.

13 Mr. Meyer. The 301(b) line was set up in that way  
14 in order to put a direct connection between the effluent  
15 limitations in (c), and the enforcement mechanisms that are  
16 established in other parts of Title 3.

17 The connection there is except as you are providing  
18 here, you may not discharge.

19 If you violate what is here, then you have the matter  
20 of enforcement.

21 Senator Boggs. I think it is substantially the  
22 same thing.

23 I just want to spread this for this discussion that  
24 we are having.

25 Is the practical effect of this that effluents, or

1 whether water quality actually depends through these two  
2 periods, 1974, or 1977, upon the best practical technology.

3 Senator Cooper. And then the period after that would  
4 require not only the best, the most practical technology  
5 available at the time, but the technology is what can be  
6 obtained during the life of the equipment.

7 In other words, a project, beyond the best practical  
8 technology at the time, the technology you believe can be  
9 achieved in that period of years?

10 Senator Muskie. The purpose of Subsection (b) is  
11 to indicate by 1985, we want a no discharge standard  
12 achieved, and by 1977, we want to know what is going to  
13 be done, and that conceivably could involve the best  
14 practical technology, and its purpose is to stimulate  
15 that, it could include closing down marginal plants, it  
16 could be anything that--

17 In other words, we want to know what it takes to  
18 do that, so we can measure the costs socially, the social  
19 costs, economic costs, and so on.

20 We may decide we cannot pay that, but at least you  
21 will know, and the deadline, if the Country is not prepared  
22 to pay the cost by 1985, that is a decision the Congress  
23 can make at that time.

24 Senator Cooper. The question is whether the language  
25 in 301(a) is where you eliminate the discharge of



19 1 pollutants, that the discharge of pollutants would be unlaw-  
2 ful, you think that is somewhat in conflict?

3 Senator Boggs. Yes.

4 It occurred to my mind that it might be received in  
5 the public mind that way.

6 I used the term of putting the cart before the  
7 horse.

8 I know it is not intended to put the cart before  
9 the horse. I understand the theory of it.

10 Senator Randolph. On your question, I have had some  
11 problem, although I have expressed it openly, I may have  
12 slipped up at the time, but on page one of standards, and  
13 enforcement, Leon, under (a), the application of the  
14 equivalent of secondary treatment.

15 Now, I think that runs into what Senator Cooper may be  
16 saying in another way, but it comes back, just what is  
17 secondary treatment.

18 Is that the best practical treatment?

19 What is it?

20 Mr. Billings. First, the words equivalent to secondary  
21 treatment have been used in this section, because the water  
22 quality standards that have been approved, the implementation  
23 plans, of water quality standards that have been approved as  
24 a result of the 1965 Act, in that act, it sets a requirement  
25 there would be a secondary treatment standard, or its equivalent

1 in industry, and this second category is in essence industrial  
2 waste treatment.

3 This may not be the best practical, it probably is the  
4 thing that you might call the base level of treatment.

5 In any event, the task of defining the treatment as  
6 secondary treatment in terms of effluent limitations is  
7 required by regulations through Section 304, which the staff  
8 has treated yesterday, which set forth the requirements on  
9 the Administrator who put out regulations defining the best  
10 available, the best control technology currently available.

11 Senator Bentsen. Mr. Chairman, I heard you use the  
12 word practical, and I have heard Senator Cooper use it, and  
13 I have heard Leon use it, but I do not find it in here.

14 Senator Randolph. I know it.

15 Senator Bentsen. I am concerned about that, and I  
16 get back to the wording, I originally submitted, and I know  
17 also at the bottom of this, it says estimate of this economic  
18 and social cost to achieve compliance.

19 It does not say what the Administrator or anyone  
20 else has to do with that estimate.

21 Mr. Billings. That is an oversight.

22 This entire section is a basis for a comprehensive  
23 report to the Congress for the purpose of midcourse correction.

24 Senator Bentsen. But it seems to me if you are still  
25 going to allow some permits, there is a great deal of dis-

1 cretion still in the Administrator in these permits, and  
2 it seems to me again you need some kind of a language to avoid  
3 arbitrary capricious rulings.

4 Mr. Billings. I will try to trace down the language  
5 and show it to you.

6 Senator Cooper. May I ask this, Leon, the words used,  
7 the best available technology, I want to ask if this could  
8 be adopted, if it should be used?

9 I just want to know what this means, this Section  
10 301.

11 It takes into account the words, the language on  
12 page two, best available technology.

13 Does that mean that a source, as noted in this  
14 section, would be only required to achieve that water  
15 quality which can be required with the best available  
16 technology up through 1981?

17 Mr. Billings. That is the intent.

18 Senator Cooper, reading from Section 304, this was  
19 distributed yesterday, and I will read the applicable  
20 sections.

21 (Whereupon, Section 304 was read by Mr. Billings.)

22 Mr. Billings. You would not have a standard based  
23 on 1981, applied to the 1971 plan.

24 You must take into consideration the age of the  
25 facility and so on.

1           Senator Cooper. Taking into consideration all of  
2 those factors, it would still be the best available tech-  
3 nology?

4           Mr. Billings. That is right. The best technology  
5 that is available for that facility.

6           Mr. Jorling. It might be helpful if I do provide the  
7 Administration's reaction to this aspect.

8           The Administration through several conversations we  
9 had at the staff level, they have not had an opportunity to  
10 review this language, but we have gone over this time and  
11 time again on a conceptual basis, and they have been asked  
12 by the staff to draft language, which we went over this  
13 morning.

14           What they had said was in our phase one, which we will  
15 use as the 76 requirement, one, the date for publicly-owned  
16 treatment plants is too short, that that should be 1980, on  
17 the basis the projects which will be constructed with the  
18 fiscal 74 money will not be on line before that, so what they  
19 have said, is that the interpretation applied to treatment,  
20 although they would have used in there their own language,  
21 but that practical treatment rather than secondary treatment,  
22 but we always read those two things as synonymous in this  
23 context, but the provision through phase one is in accord  
24 with them.

25           They are concerned that when we move to phase two, in

23

1 two respects, they go to how well the economic factors  
2 being considered in the application of best available  
3 technology to a discharge source.

4 They do not see that, and it does not come clear  
5 in this draft at all, how that would be made.

6 Senator Bentsen. That is my concern. That is what  
7 I have been striving for to get back to the original  
8 question of the economics, and social costs and benefit  
9 ratios.

10 Mr. Jorling. In the second phase?

11 Senator Bentsen. Yes.

12 Mr. Jorling. I think that is what we will have to  
13 focus on, in the application of this second level of  
14 technology, which is designed to put forward the no dis-  
15 charge.

16 Senator Boggs. The Administration favors the  
17 concept and equivalent of no discharge?

18 Mr. Jorling. I will not say so categorically that  
19 they support no discharge as the objective.

20 They would prefer in the second phase to have some  
21 ability to relate the effluent controls to be applied toward  
22 that objective, if that objective is determined appropriate,  
23 to require some method of relating the control applied to the  
24 performance, to the actual effect, and this gets back into  
25 the gray area between going toward effluent controls, or



1 toward the ambient quality toward effluent controls, but what  
2 they would like is some way of considering the impact on  
3 ambient quality, because there may be some situations, where  
4 even with this character of control, the ambient quality  
5 will not improve, or somehow not be brought into conformance  
6 with the overall objective of the act, which is to maintain  
7 water quality, so they would like some flexibility, and  
8 we talked at the staff level about a proposal which would  
9 enable them after the application of this degree of technology  
10 to review on a specific basis, whether or not the water  
11 quality was being improved, and then make a judgment whether  
12 something more is appropriate, but other than that, I think  
13 they agree in general with the thrust, not only of this  
14 proposal, but of using this proposal to tie in the Refuse Act  
15 permit program into the overall strategy of the Water  
16 Pollution Control Act, so I think the main concern at EPA,  
17 this is EPA's reaction, although it has been discussed with  
18 OMB, is with the consideration of the economic factors of  
19 phase two, with respect to discharges, and on that point,  
20 when pressed, they agreed the consideration should be the  
21 universal consideration of economics should not be the main  
22 factor, rather it should be the community effects, not just  
23 the impact of the discharge source, but the impact of  
24 the control technology applied to that control source in the  
25 community complex.

25

1 Senator Bentsen. I would agree with that.

2 Senator Buckley. Is it clear the word discharge  
3 goes exclusively to--

4 Mr. Jorling. We have been trying to work this out  
5 in the concept of the ocean dumping bill, and we are  
6 trying to work out a disposal and trying to restrict the  
7 word discharge to point source discharge.

8 Senator Buckley. And I would say I share Senator  
9 Bentsen's concern about the practical factors.

10 I understand the desirability of establishing a goal  
11 that is kind of tough, but we have heard, Senator Muskie  
12 earlier gave out the desire, to not hold out something that  
13 is not achievable.

14 Would there be any permit after the word elimination,  
15 that is--

16 Mr. Jorling. I think in the statement of policy, it  
17 might not be appropriate there, but rather in the operative  
18 language.

19 Senator Buckley. You are talking about no discharge?

20 Senator Baker. What would anybody think of this  
21 as the statement of policy.

22 The purpose of this title is to restore and maintain  
23 the chemical and physical and biological integrity of the  
24 waters of the United States, through the elimination of the  
25 discharge of pollutants, or the reduction thereof, to the

1 extent practicable.

2 Senator Buckley. I would prefer that.

3 Senator Jordan. It seems to me that would wrap it  
4 up.

5 Senator Baker. What I am trying to say, I am for  
6 no discharge, or as close to it as you can get, but I do not  
7 think you will ever get a hundred percent no discharge, and  
8 I wonder if we are not just fooling ourselves by saying so.

9 Mr. Billings. May I ask a question, in your inter-  
10 pretation of that language, after the screws have been turned  
11 the second time, the Administrator and the states would  
12 check the results of that turning of the screws, and then if  
13 they found that the objectives of the Act for the receiving  
14 water had been obtained, there would be no further scrutiny,  
15 is that right?

16 Senator Baker. No, because you are then re-relating  
17 criteria to the effluent, and I am not.

18 Mr. Billings. Okay.

19 Senator Baker. I am saying we want to get no discharge,  
20 or as close to it as we will get.

21 Mr. Billings. What you are saying you will continue  
22 to turn the screws, but it will relate to practicability of  
23 achieving elimination.

24 Mr. Baker. The elimination of discharge.

25 Mr. Jorling. It should appear some kind of language

1 would be required at the point, where the requirement is  
2 placed on an individual.

3 In addition to the suggestion that you have made,  
4 or even in this, that somehow at the time you go to phase  
5 two, there should be some calculation of what the practi-  
6 cality is, but practicality measured on a broader base than just  
7 that man's practicality, before the best available technology  
8 is imposed.

9 Senator Baker. I think I know what you mean.

10 It means you will judge what is practicable, and what  
11 is not practicable on an individual application basis, but I  
12 hope it does not mean you will judge it on the basis of the  
13 result obtained, but rather on the technique and technology  
14 to obtain as close to no discharge as you can get, is that  
15 what you mean?

16 Mr. Jorling. Yes.

17 Senator Bentsen. But you are relating it to the  
18 social and economic benefits to the community, rather than  
19 to the individual discharger, and I go along with that, but I  
20 think you must have that caveat in there, it not be an unreas-  
21 onable ratio in the way of costs to benefits, both social and  
22 economic.

23 Mr. Billings. Senator Baker, one of the troublesome  
24 aspects of the proposal of the addition or such reduction  
25 is does that allow for a relaxation of the pressure on

28 1 technology toward the no-discharge goal.

2 Senator Baker. It probably does in theory, but in  
3 practice, I wonder if it does, because does it help to  
4 beat the horse harder when he is already running as fast  
5 as he can, and I think the situation, we have already mandated  
6 no discharge as the objective, which said only in this case,  
7 there may be certain cases, where it is literally impossible  
8 to have no discharge, but we will make it as close to no-  
9 discharge as you can get.

10 I do not know if that detracts from incentive to  
11 develop technology to accomplish no discharge or not.

12 You could make another argument that high technology  
13 and future technology would not produce no discharge, but --

14 Mr. Billings. That is why the language of no dis-  
15 charge to pollutants.

16 Mr. Meyer. Could you repeat that, the language you  
17 read?

18 Senator Baker. The purpose of this Title is to restore  
19 and maintain the chemical and physical and biological integrity  
20 of the waters of the United States, through the elimination of  
21 the discharge of pollutants, or the reduction thereof, to  
22 the extent practicable.

23 Senator Buckley. I would like to raise one point, that  
24 I think fits into this, and elsewhere in the bill, and that  
25 is the definition of the word pollutant.



1           If you look at the definition on page 107, I think you  
2 would have to conclude that anything beside still water has  
3 a pollutant in it.

4           Also, in the early definition of purposes, we use  
5 the word pollution occasionally, and I think we might be  
6 tightening the whole Act if we were to add to the definition  
7 of pollutant, the words unless such substance will not cause, or  
8 contribute to the pollution of the waters, and then a defini-  
9 tion of pollution, and I suggest the following: pollution  
10 is the man made, or man inducted alteration of physical,  
11 chemical, biological and radiological characteristic of water  
12 resource in such a degree or matter to render it harmful  
13 to human, plant or otherwise impair the utility, or public  
14 enjoyment of the resource.

15           Otherwise, we will have a hanging part somewhere.

16           Senator Baker. Let me back up and say that I think  
17 the better way to handle this, if you will permit me to  
18 withdraw and give grace to your suggestion, is to leave the  
19 definition as it is, and then at some other place in the  
20 Act, possibly, the definition, that we are not calling for a  
21 categorical drying up of all discharges, but rather to do the  
22 very best that technology will permit.

23           Otherwise, what you do, in the very beginning of the  
24 Act, where you are trying to establish the national purpose,  
25 you are beginning by alluding--

1 Senator Boggs. I am inclined to agree with you.

2 In the very beginning of the Act, Section 101(a),  
3 for the purpose of this Act is to achieve as rapidly as  
4 practicable in the waters of the United States, a water  
5 quality that shall at all times provide for the protection,  
6 propagation of the population of shell fish, wildlife, and  
7 allow recreational activities in and or the waters of the  
8 United States, by restoration of the natural, chemical,  
9 physical, and biological integrity of such waters, and a  
10 maintenance of that integrity, and section two, in order to  
11 achieve this level of water quality, it is further the purpose  
12 of this Act to eliminate the discharge of all pollutants.

13 The definition of pollutants, in the waters of the  
14 United States, and then proceed on the basis of the best  
15 technology to accomplish that over a phased period, to  
16 accomplish this goal, and hopefully, by 1985, but you have various  
17 phases of it, for example, January 1 of 1973, the Administra-  
18 tor notifies the dates of the existing implementation plan,  
19 or sources that fail to achieve the best practical technology.

20 That is in the proposal. July 1, 1973, states submit  
21 any implementation plan, revisions to achieve the best  
22 practical technology by 1977, and then January 1, of 1977, the  
23 best practical technology would be theoretically under this  
24 bill, as I see it, in use, and then you come to, on your no  
25 discharge standard, as we approach that, in January 1, 1975,

31 1 it states submit new implementation plans to achieve the  
2 purpose of this Act.

3 July 1, 1975, authorization for this Act expired,  
4 giving Congress six months to adjust spending to the level  
5 necessary to proceed toward the no-discharge objective.

6 I do not think it makes a lot of difference, but it  
7 would seem to me in this period, like 1985, or until we  
8 accomplish the goal of no discharge policy, in reality, we  
9 have got to get the best practical technology approach to  
10 it.

11 Senator Bentsen. You keep coming back to that word  
12 practical, that is fine, but they do not put it in their  
13 language.

14 I want some kind of protection against the unreasonable  
15 cost ratio.

16 Senator Boggs. Right.

17 Senator Jordan. What would be practical to one fellow  
18 would not be practical to somebody else, and you may have some  
19 impractical people making the guidelines.

20 Senator Boggs. The best practical control technology,  
21 that is in the language, is it not?

22 Mr. Billings. In terms of the definition of what  
23 the Administrator is required to promulgate to define effluent  
24 limitations, in a particular instance, the word practical  
25 is not used, to identify control measures necessary to

1 achieve.

2 The key word is available, whether or not they are  
3 available is the basic test, it was agreed upon in the  
4 Clean Air Act, the available means, available at a cost that  
5 can be assumed by the person required to control, but to the  
6 extent that practical, in this sense, is important, it does  
7 not detract from what is presently required under the exist-  
8 ing water quality standard, because they have not required  
9 anything that is anything more than practical.

10 In fact, they have required a whole lot less.

11 Senator Boggs. The Administrator would be the final  
12 arbiter.

13 Senator Bentsen. Let me back up on that.

14 I think this word practical has been very carefully  
15 avoided in this situation.

16 I am not pressing for the use of the word practical,  
17 but I do want again some protection against some unreasonable  
18 and arbitrary ruling that calls for a cost benefit ratio,  
19 or--

20 Mr. Billings. Let me ask a question, in the new  
21 source performance standard, it seems that in the staff's  
22 view, that that kind of approach which puts a burden on the  
23 discharger is preferable to making the compromise across the  
24 board in determining what the control measures are that are  
25 available.

33 1 Senator Bentsen. I do not object to that. In the  
2 new point source, you had that kind of protection where they  
3 had to come forward, and if they could prove it was a reasonable  
4 one, then--

5 Mr. Billings. It was modified.

6 It seems to me if this is the opinion, the members of  
7 the staff should be instructed to try to take that concept and  
8 build it into this section as a general provision for individual  
9 appeal from the effects of an effluent limitation, rather than  
10 having the entire effluent limitation challenged across the  
11 board.

12 Senator Bentsen. I think I go along with that.

13 Mr. Jorling. What you suggest is put in here, to  
14 provide in subsection something, and then go to that language  
15 we adopted for a new source performance standard, which would  
16 be something, unless upon application, the owner, operator  
17 of any source, which contests the imposition on him, the  
18 Administrator determines after public hearing, the economic  
19 and social costs, and so on?

20 Mr. Billings. Let me ask one question on that.

21 It seems that because Section (C) (1) (a) is a grand-  
22 fathering in of decisions that have already been made, for  
23 sources that exist, equivalent of secondary treatment, which  
24 is the guidance of the existing approved water quality stand-  
25 ards for 41 states, if that appeal structure was inserted now



1 and applied to that, you would have the potential for slowing  
2 down all of the compliance that we are trying to keep on  
3 going.

4 Is not the key more over here where you are getting  
5 into the question of the greatest degree of effluent  
6 control, is not that where you are concerned about practi-  
7 cally, phase two, is it not phase two, Senator Bentsen?

8 Senator Bentsen. That is where it comes to really  
9 bind, and you ought to have some protection against the arbi-  
10 trary unreasonable requirement.

11 Mr. Billings. It seems the language which is similar  
12 to that which was approved for new source, modified new  
13 sources, would go into Section 2(a), as Tom said, as an  
14 except clause, and that would be the staff's recommendation to  
15 the physical location of the language.

16 Senator Bentsen. I think I would go along with that.

17 Senator Jordan. That would be much better in my  
18 opinion.

19 I want to know as the definition of pollutant  
20 contained in this bill, is it there?

21 Mr. Billings, Yes, sir.

22 Senator Jordan. I do not think it is known yet.

23 Senator Eagleton. Is the upshot of the exchange  
24 between, the dialogue with Senator Bentsen, Senator Cooper  
25 and Leon that we will have written into phase two an economic

1 and social benefit cost situation, is that right?

2 Why should it not be in phase one?

3 Mr. Jorling. It is already there.

4 Mr. Billings. The decision has already been made,  
5 that phase one is a grandfather clause where decisions were  
6 made as a result of the Water Quality Act of 1965.

7 If you impose a new test, you will re-open all of those  
8 decisions, and potentially, reduce the degree and rate of  
9 compliance, that you would hope to achieve.

10 Senator Eagleton. You might, but a city on a river  
11 can show they put in a secondary treatment facility, they  
12 will not change the quality of the water one iota, the social  
13 benefit derived by their doing it is nil, and it will cost  
14 economically X millions of dollars, but they must do it  
15 anyway, because we want them to build a secondary treat-  
16 ment facility.

17 Why?

18 Mr. Billings. The presumption of the 1965 Act is that  
19 anything less than that is having a dynamic impact, and a  
20 dramatic impact on water quality, regardless.

21 It is the virus question, impact of nutrients in the  
22 estuaries, and so on, because basically, in providing less than  
23 secondary treatment, the river continues as a sewage treatment  
24 plant for the City, and this has a definitive and identifiable  
25 economic effect.

1           Senator Eagleton. I don't know. If the quality of  
2 the water is still the same after you built it, as it is  
3 before you built it, it makes not one bit of difference.

4           Senator Boggs. The water quality ought to be  
5 better.

6           Senator Eagleton. I am told of situations, I may  
7 be told wrong, I am told of the situation, regardless of  
8 what you do at location X, if you put in a secondary treatment  
9 facility, it will not change it one bit, because of what goes  
10 on upstream.

11          Senator Boggs. The people upstream will have to change  
12 theirs too.

13          Senator Muskie. There are two possible situations,  
14 where, one, the body is so big, and there are so many pollution  
15 sources, that the elimination of any one by itself will not  
16 necessarily affect the quality, but if you can make that  
17 case for everyone, and you make that case for all of them, you  
18 get nothing done.

19          That is one point.

20          Secondly, the other kind of situation, where the  
21 volume of the water and the flow, provides an assimilated  
22 capacity that seems to be sufficient, but I know of examples  
23 in Maine, where that was true, suddenly, after 80 years, without  
24 any additional pollution sources, the assimilated capacity  
25 spilled over, and now you have the worst cesspools in the

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1 last ten years, because the assimilative capacity was not  
2 as elastic as it seemed, even though it had gone by for  
3 a long time, and I suppose you can pose a hypothetical situa-  
4 tion where it makes complete nonsense to build a treatment  
5 plant, but I would doubt it.

6 Senator Eagleton. Suppose the sources upstream are  
7 not point source problems, as general agricultural runoff,  
8 which we do not have any control over at the present time,  
9 we do not know how to control it.

10 Mr. Billings. Senator, without responding to that  
11 specific question, one additional point, because you cannot  
12 identify in advance of the application of that secondary  
13 treatment, what the result of it will be on a river quality,  
14 the argument that you made could not apply, is one which could  
15 be made almost anywhere, because the fact is the results of  
16 the application will not be known until the application has  
17 been made, which gets you to the argument, why you go toward  
18 a no-discharge standard.

19 Senator Jordan. I am just asking this for information,  
20 supposing a man's plant, the effluent meets the water quality  
21 standard, you want him to build another plant below it to do  
22 it all over again, is that what you are talking about,  
23 Senator?

24 Senator Eagleton. Pardon me. Could you repeat it?

25 Senator Jordan. Suppose a city builds a treatment

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1 plant, and it meets the standards, do you want him to build  
2 another one, because he will have a secondary, all you want  
3 him to do is to meet a quality standard of water, whether it  
4 goes through one theory plant or does not?

5 Mr. Billings. The theory of the approach of no-discharge  
6 standard is you are attempting to eliminate the discharge of  
7 pollutants, not attempting to go the other way, and start  
8 out and come on up and determine the quality, and apply a  
9 level of control to the source.

10 In the past, the compromise had been made on what  
11 the quality of the water should be.

12 They build the treatment plant, say, well, this is  
13 the water quality achieved, the is the water quality it will  
14 have, without regard to the overall ecological effects of  
15 the discharge of the pollutant into the water.

16 Senator Jordan. What do you want him to do?

17 Mr. Billings. The concept expressed here is for  
18 him, as quickly as practicable, to eliminate his discharge  
19 entirely.

20 Senator Jordan. Where are you going to put it?

21 Mr. Billings. There are a variety of techniques  
22 available.

23 There are techniques that will become available, in  
24 terms of on land disposal, if you are talking about municipal  
25 sewage treatment, there are processes to extract pollutants



1 from industrial waste streams, and there are industrial  
2 processes which could recycle the water they use, so they  
3 do not have any discharge whatsoever, not even so much as  
4 the discharge of pure water.

5 Senator Jordan. They have got to be -- There has  
6 got to be a practicable way to do it. That may not be  
7 the right word either, the definition of this, that you cannot  
8 set some kind of a definition on this that is almost impossible  
9 to meet, or some expensive way, so expensive that it cannot  
10 be met, from the city, or a corporation, or anybody else.

11 There has got to be a reasonable definition of what  
12 can be put in the river or any kind of stream, because there  
13 has been a lot of work done on this, and you keep coming  
14 back, they keep coming back, and say, this does not meet the  
15 standards.

16 That is a serious proposition, and you take land  
17 fill, that is serious, because there is no place to put  
18 it.

19 You say what are you going to do with it. One fellow  
20 said recycle, and they say what will you do with it after  
21 you recycle it, and some of these things you cannot recycle.

22 I have no objection to cleaning up the water, and I  
23 want it cleaned up, but I think we have to be reasonable in  
24 setting some kind of standard.

25 You are talking about land, putting it back on the

40 1 land. You must know what you are talking about. It is all  
2 right for an individual house or two or three houses, where  
3 there are individual septic tanks, but in large quantities,  
4 that simply does not work.

5 I know places right now, where one house, they have  
6 a septic tank, and two-hundred people down, it would not  
7 work.

8 You certainly do not want to put a great many people  
9 out of business, and to diminish employment.

10 Senator Muskie. Of course that is the problem.  
11 The fact is with all of the policy in the last few years, we  
12 have not done anything in effect about cleaning up the  
13 water.

14 All of the decisions have been compromised, programs  
15 have been undermined and underfunded, and the net result  
16 is no progress, and what we are struggling to find here is  
17 a target that is definite enough so that we can make it clear  
18 to the Country what we want to do, and that is difficult to  
19 do some of this since there are so many imponderables, and  
20 there are so many individual problems.

21 What we are trying to put together here is a clear  
22 cut policy, and to set in motion a process that moves us  
23 clearly in that direction, gives us a chance to look at  
24 new information, new developments to crank them in.

25 I do not think in fifteen years, which is what we are

1 talking about here, is an unreasonable pressure.

2 In fact, I would suspect it would be argued before  
3 the day is over, it is too relaxed a pressure.

4 So you get both arguments, so that is the concept  
5 here.

6 You say what are we going to do with these wastes,  
7 and I grant you, there is a problem in finding a place to  
8 put them, there is one place I do not want to put them, and  
9 that is in water, because that is the basic life giving  
10 source.

11 Difficult as it is to find other places to put them,  
12 we have to find them.

13 If you rely on the capacity of the stream to assimilate  
14 it, that is a very uncertain thing, because with the growth  
15 of population, the growth of pressures, growth of pollutant  
16 sources, you are bound to exceed your assimilated capacity, so  
17 that at some point you have to face what you will do with  
18 the additional wastes, and if you will face that problem with  
19 the assimilated wastes, you ought to face that problem before  
20 you reach the assimilated capacity.

21 You know there is a limit. Are you going to wait  
22 until you reach that point in every waterway, and have hundreds  
23 of miles of open cesspools in America, or are you going to  
24 recognize that you cannot go that far down the road, and begin  
25 to work on a policy that does not rely on the assimilated

1 capacity.

2 We have reached the limits, and there is more and more  
3 evidence that we have reached the limits.

4 Lake Erie is an outstanding example. Lake Tahoe, we  
5 have some streams in Maine not well publicized nationally,  
6 lakes that are now dead, because of the assimilated capacity  
7 is exceeded, and we have 2,500 lakes in Maine, and we could  
8 argue, well, there is only a couple of them that are dead,  
9 let's wait until half of them are dead before we begin to  
10 worry.

11 That will get us nowhere, because when we get to that  
12 point, the momentum will be built up to where they will all  
13 be dead, so I do not think we can rely on the assimilated  
14 capacity of streams.

15 Now, I think basically every member of this Committee  
16 including Senator Jordan believes that, but what frustrates  
17 us all, is how can we improve our capacity to deal with  
18 these wastes, and at the same time take into account the  
19 very legitimate problems that exist until we reach that  
20 point.

21 Now, that is really the struggle, that is what is  
22 troubling you, that is what is troubling me, Senator Tunney,  
23 and all the rest on this Committee.

24 How do you stretch the possible and speed the process  
25 to the goal, without bringing our industrial society to a

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1 screeching halt.

2 Nobody wants that, and it is touch to find the  
3 right combination of pressure and practicality that will  
4 serve both objectives.

5 It is tough, and you fool around with words, day after  
6 day, and we still find it tough, but I get the importance  
7 of this discussion, we are really down to the heart of the  
8 bill from my point of view, that let us get it all out in  
9 the open.

10 Senator Tunney. Could I be recognized for a few  
11 thoughts?

12 Mr. Chairman, as you know, I have given considerable  
13 thought to the problem of reaching a kind of water quality  
14 that we all have, and I have in the Subcommittee introduced  
15 that amendment which would have provided, which will provide,  
16 if it is accepted, a minimum national water quality standard.

17 I have also had the opportunity to read the staff  
18 language on print two, as a substitute for the Subcommittee  
19 language, and I have had the opportunity last night to read,  
20 I guess it is called print three, and now I have read print  
21 four, as far as Section 301(a) is concerned, I would be the  
22 first to say that I think print three and print four represent  
23 a considerable improvement over print two.

24 I think we have to recognize that the staff has been  
25 working under tremendous pressure, and I quite frankly do not



44 know how they can turn out these drafts as quickly as they  
do, and knowing that I would be incapable of doing so, but I  
do feel that we are faced with a very fundamental question,  
when we eliminate the language as it is contained in the  
Subcommittee print on water quality, and I think that it is  
a noble goal to move towards a no-discharge standard, and  
I accept that, I think that it is a fine ultimate objective  
to reach for, and I do not mean in an analogy to shoot down  
that position by saying that I think it is about the  
equivalent in our space program, having an objective to go to  
another solar system.

I think it is going to be very, very difficult to  
achieve no discharge.

I want to see us achieve it, God knows, and I hope  
that we will achieve it, but I think that if we have a  
standard, which is so high, that it appears the Administra-  
tor, or the state agencies, or to other members of Congress,  
that we will not achieve it, then the standard itself is  
honored in the exception, and it becomes sort of a joke, because  
everybody concerned by consensus sort of accepts the fact  
it is not going to be reached in the time definite, and,  
therefore, why really bother, we are getting further and  
further behind, as every year goes by, and particularly this  
could be true, if it appears that the benefit to be  
gained in certain particular situations, is not the equivalent,

45 1 or anywhere close to the equivalent to the cost.

2 Now, I would like very much to see the bill contain  
3 a no-discharge standard as an ultimate objective, very,  
4 very much, but I do feel that we have to recognize that in  
5 the meantime we ought to be thinking in terms of some quality  
6 standard, which is easily identifiable, which people can  
7 focus their attention on achieving for most waterways, within  
8 a relatively short period of time.

9 Now, I agree that when you start talking about assimilated capacity, as an ultimate objective, you are really in  
10 a sense admitting defeat, and I do not want to talk in terms  
11 of defeat as an ultimate objective, or of assimilated  
12 capacity, but I would have to point out in the language of  
13 Section 306, new sources, language of Section 307, toxic  
14 material and pretreatment, we talk about assimilative capacity,  
15 because we are talking about performance standards in those  
16 sections, and when we talk about best technology, we are  
17 talking about assimilation, because we recognize, we will  
18 not get to no-discharge in the immediate future, so we are  
19 talking about best technology to clean up pollution.  
20

21 Now, that is a quality standard, as I read it, but  
22 it does not state it as such, it is by reference, if you  
23 will, by indirection, and I feel that the Committee perhaps  
24 ought to make a basic decision whether as a plateau that they  
25 want to try to reach in a relatively short period of time a

46 1 minimum water quality standard, or whether they want to scotch  
2 the idea of the minimum water quality standard as a plateau,  
3 and just go toward the ultimate objective, which is no  
4 discharge, I would prefer that we would have as an ultimate  
5 objective no discharge, that we have as the immediate goal  
6 a minimum water quality standard, and that the bill, the  
7 relevant section of the bill be changed by the staff to  
8 achieve that goal, those sections, and I would say that  
9 for those that argue for--

10 Well, I would say that there is no connection between  
11 effluent limitations and water quality, that the bill is  
12 replete with examples of such a connection being made in  
13 Section 306 and Section 307.

14 Section 306 is new sources, and Section 307 is toxic  
15 materials.

16 Section 304, I understand, is being reworked now,  
17 but the Section 304 in print two, certainly talked about  
18 water quality, and had water quality as a reference to effluent  
19 limitations.

20 Under the print two section 302, by 1976, there were  
21 state effluent limitations, and treatment standards, which  
22 were expected, which were timed, these effluent limitations  
23 and treatment standards into water quality.

24 I understand under the new section 302, this is done  
25 again in there by indirection, by talking about secondary

47  
1 treatment.

2 We are going to have as a minimum secondary treatment.  
3 Well, it is assumed, I would think, if we are going to go  
4 through the tremendous expense of secondary treatment for  
5 all municipalities, that we expect some improvement in the  
6 water quality, otherwise we should not get into the business,  
7 so in that sense, we see again a tie in between water quality  
8 and effluent limitations, so as I analyze the legislation, al-  
9 though the legislation in print four, or print five, print  
10 four, we are talking about an effluent limitation standard,  
11 no discharge standard, but because using common sense,  
12 we cannot separate quality from effluent limitations, in  
13 other sections of the bill, we make that connection.

14 Now, so rather than going on, and wasting the  
15 Committee's time, I think we might just have a vote on  
16 whether or not we want to have water quality as an inter-  
17 mediate standard, and if we decide that we do not want water  
18 quality as an intermediary standard, then I will certainly  
19 accept that, and I would like then to work with the rest  
20 of the members of the Committee to try to improve the no  
21 discharge standard, and I have some thoughts on that.

22 Senator Muskie. I do not want to belabor an  
23 issue that we discussed at length, but I think I ought to  
24 make an observation.

25 I do not argue, never have, there is no connection

1 between effluent limitations and water quality standards,  
2 when obviously there is.

3 If you had no effluent discharges, you would have  
4 natural water quality, and the effluent discharges reduce  
5 water quality.

6 Of course, there is a connection, and may I say, that  
7 the water quality standard which Senator Tunney discusses  
8 will be achieved under Section 301 as it is written.

9 If you do what is required as of January 1, 1976, and  
10 if you do what is required as of January 1, 1981, in the  
11 vast majority of the waters of this Country, you will achieve  
12 the water quality standards that Senator Tunney is talking  
13 about, so obviously there is a direct connection between  
14 the two, and we all want to improve water quality.

15 The question is how to do it.

16 You know that by putting or applying your control  
17 mechanism, at the discharge point, you can control water  
18 quality, but there is no way of knowing how you can apply your  
19 pressure at the water quality of water, and get precise control  
20 on effluent discharges.

21 That is the point.

22 Senator Jordan. Repeat that again.

23 Senator Muskie. You know if you control the discharge,  
24 if you gear your process to increasing controls over effluent  
25 discharges, you will have a direct benefit on water quality,



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1 but there is nobody that can tell you that, you cannot go and  
2 test the quality of clean water, determine what degree of  
3 control you have to apply to get a different water quality  
4 standard, at a predictable level.

5 You have to guess at it. You have to go back to your  
6 discharger, reduce him, and then see what the results are, and  
7 see if the water quality achieved measures up to what you  
8 hoped you would get by doing it, so this is why we are not  
9 talking about goals here.

10 I want to get the quality of water that Senator  
11 Tunney is talking about, and I think that under Section 301,  
12 you will come close to doing that.

13 You do not do it exactly.

14 The second point, I think, is that if you set water  
15 quality instead of some level of discharge as the objective,  
16 you will have to use exactly the same techniques and control  
17 mechanisms.

18 You will have to control discharges, you are going to  
19 have to use best available technology.

20 You are going to have to in some instances close down  
21 marginal plants. You are going to have to do the same  
22 things so all that we are really talking about, not where  
23 we want to come out, but how do you turn the screws so that  
24 you know reasonably in advance what you have to do to come  
25 out there, what it is going to cost you, and you are sure you

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1 do these things you are going to get to your ultimate result  
2 if you do those things.

3 Now, the no-discharge standard is a water quality  
4 standard.

5 It is not different. You have no discharges at all,  
6 after a certain period of time, and it talks for waters to  
7 purge themselves of pollutants, so that you will have a  
8 natural water quality.

9 Whether or not no discharge is a reasonable thing  
10 to strive for is something which I think the language here,  
11 it can be improved, I am sure, to safeguard us against--

12 Well, let me say that midcourse is six years from now,  
13 ample time in my judgment to provide the information that  
14 will tell us what or how many more turns of the screw do we  
15 need to make to get no discharge, zero discharge.

16 What will be the impact, what will polluters have to do,  
17 what will it cost.

18 Is that cost unreasonable?

19 When you balance the social benefits of doing it, against  
20 the social benefits of not doing it, so 1977, 8 years before  
21 the no-discharge deadline, we will know whether we want to go  
22 the rest of the way, and if you go the rest of the way, we  
23 will have a pretty good idea, whether it is achievable, and  
24 whether or not that is acceptable, so I do not think this  
25 language poses any problems in terms of imposing an acceptable

51 1 cost to quality, and what we want is the swimmable water,  
2 that Senator Tunney has been talking about, and we want some-  
3 thing better than this, as fast as we can get it, if it in  
4 terms of the social benefits balances out.

5 Really, there is no objection to indicating in the  
6 statement of purpose that along the way we want to achieve  
7 this swimmable water quality.

8 I think if you make that the one and only target,  
9 without spelling out as this amendment does, the steps that  
10 you are going to require to get there, I think you may set  
11 the target and get there, and find you miss it.

12 I do not know how many degrees midcourse corrections  
13 will involve, but it is a matter of achieving the goal, but  
14 I would hate to set a direction that would knock us off  
15 course.

16 Senator Jordan. When you speak of no discharge, you  
17 do not mean of putting the water back into the river that  
18 it came out of?

19 Senator Muskie. No.

20 I mean no discharge of pollutants.

21 Senator Jordan. What you want to say is water quality  
22 which will be permitted to be put back in the stream.

23 In the first place, any manufacturer, or any city, he  
24 knows what you want to take out of it?

25 Senator Muskie. That is right.

52      1            Senator Jordan. There are certain things that are  
2            probably not harmful at all, and there is no sense in going  
3            to the expense of taking it out if it does not hurt any-  
4            thing.

5            What you want to obtain, as I see it, is an acceptable  
6            water standard, back into the river, but it all has got to  
7            go back into some stream.

8            You do not put anymore water back than you have got.  
9            It has to come from some source before you put it in there.  
10          Usually your big sources of water are lakes which have been  
11          provided for city storage, and that water, is to some extent,  
12          it is not drinking water, because it goes through filter  
13          plants.

14          If you have a plant or a city on a river, whatever  
15          it might be, you must have some guideline of how good a  
16          water do you want put back in the river.

17          Is it harmful, or is it not harmful, and you may  
18          cause a city to go to an awful lot of expense that they do  
19          not need to do.

20          I am talking about an acceptable water to humans, to  
21          fish, whatever it may be.

22          Senator Muskie. What we are trying to do here, the  
23          staff has set up and suggested to us, and none of us have  
24          approved it yet, but the quality guidelines, set up a fourteen  
25          year period, in which we begin doing the things we already



53 1 said we are doing in the first place, and which we indicate  
2 clearly in the second phase, we are going to improve on them,  
3 to the extent that the best available technology permits, and  
4 that in the third phase, do whatever else the Country thinks  
5 needs doing to achieve the level of water quality, that by  
6 that time, we have decided we want ultimately to have, so  
7 that is fourteen years in which to learn, fourteen years in  
8 which to begin work, fourteen years in which to spell out  
9 what we want done, fourteen years in which to improve our  
10 capacity to deal with these problems, correct them, to clean  
11 them, fourteen years, and that is fourteen years which is a  
12 short time, because what you are talking about here, in  
13 conjunction with the air quality act of last year, what  
14 you are talking about, if both of these pieces of legislation  
15 are on the books, what you are talking about is a massive  
16 restructuring of the industrial and economic life in this  
17 Country.

18 We are not talking about a little thing. We are  
19 talking about a massive restructuring of the economic and  
20 industrial capacity of this Country, so that we will have  
21 water in 1985, that is not only for drinking, fishing,  
22 recreation, but for industrial and agricultural use.

23 All of those uses are diminished if we do not preserve  
24 the quality of the water.

25 We have streams in Maine, a relatively rural state,



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1 where you cannot put another industry there because there  
2 is not any oxygen left in the river, so when we talk about  
3 cleaning up water quality, we are talking about water for  
4 all purposes.

5 You know, less than one percent of the world's water  
6 is fresh potable water, less than one percent, and that has  
7 to do man for his drining, his boating, his recreation, his  
8 agriculture, unless we find a way to desalinize the other  
9 99 percent, and that is an expensive proposition, so we have  
10 a fixed supply.

11 What we are talking about is a massive restructuring  
12 of our economic and social institutions, so you can assure  
13 a continuance of that supply for all of those purposes, and  
14 fourteen years is not too much time, and maybe it is too  
15 much time from another point of view to do that job of  
16 restructuring, in that it is a massive job, and we are trying  
17 our best to do is develop some targets, so that everybody  
18 understands what we have to do.

19 Senator Jordan. It is easy to get oxygen back into  
20 the rivers.

21 Senator Bentsen. We have two very fine presentations  
22 of opposing views, whether we try to control the effluent  
23 or the quality itself, and I do not want to cut anybody  
24 off, and I know this is a very basic point, but we have a  
25

55 1 vote at 4:30, and I have a feeling we probably will not  
2 get back.

3 Senator Randolph. I would like to talk about our  
4 schedule.

5 (Discussion off the record.)

6 Senator Randolph. We will adjourn now, and we will  
7 tentatively meet at 2:00 o'clock Monday morning, as a  
8 Committee to continue our work, and then tentatively we  
9 will meet Tuesday morning at 10:00 o'clock.

10 Thank you very much. The Committee stands in  
11 recess.

12 (Whereupon, the Subcommittee was recessed at 4:15  
13 o'clock p.m.)

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